

No. 688,946.

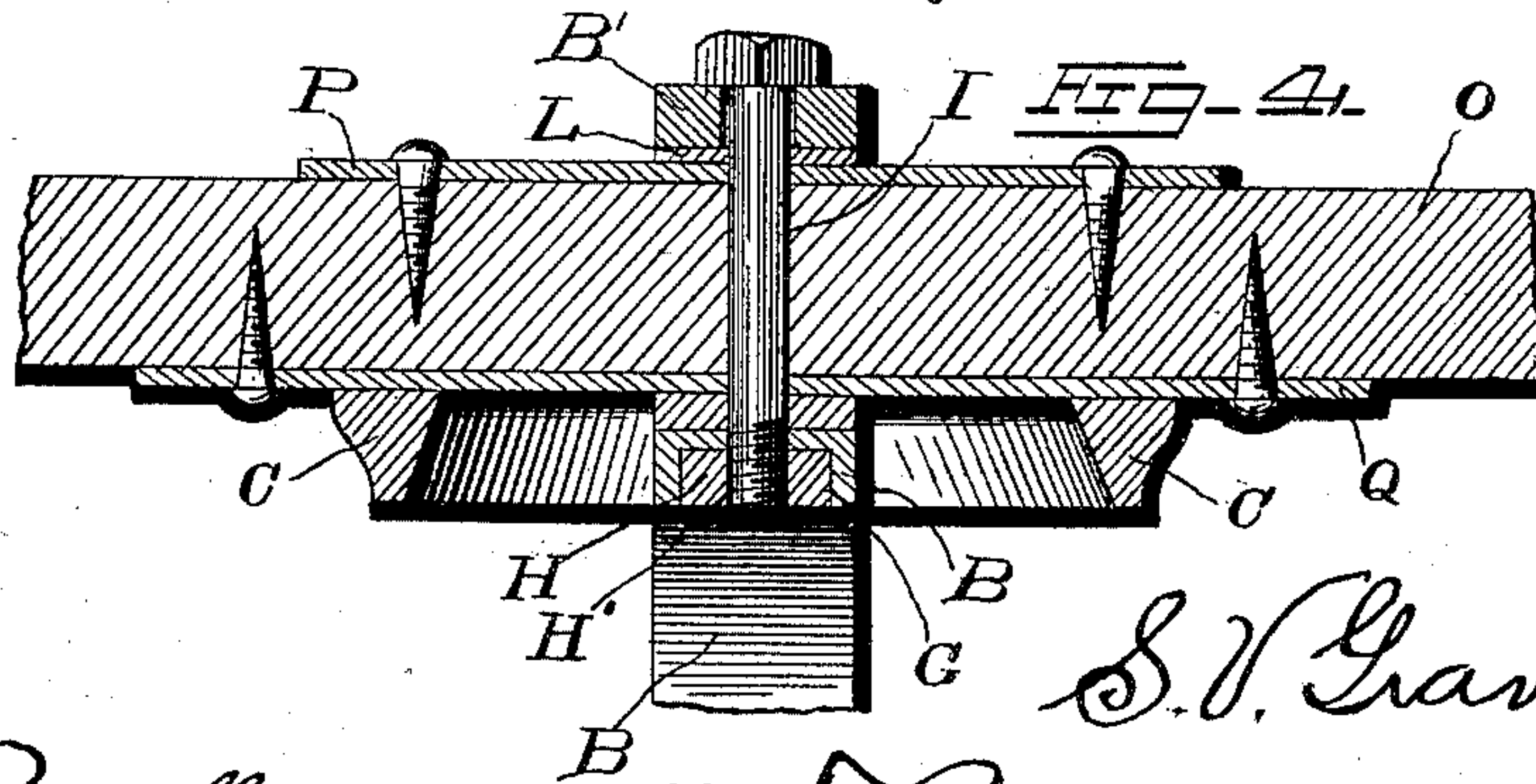
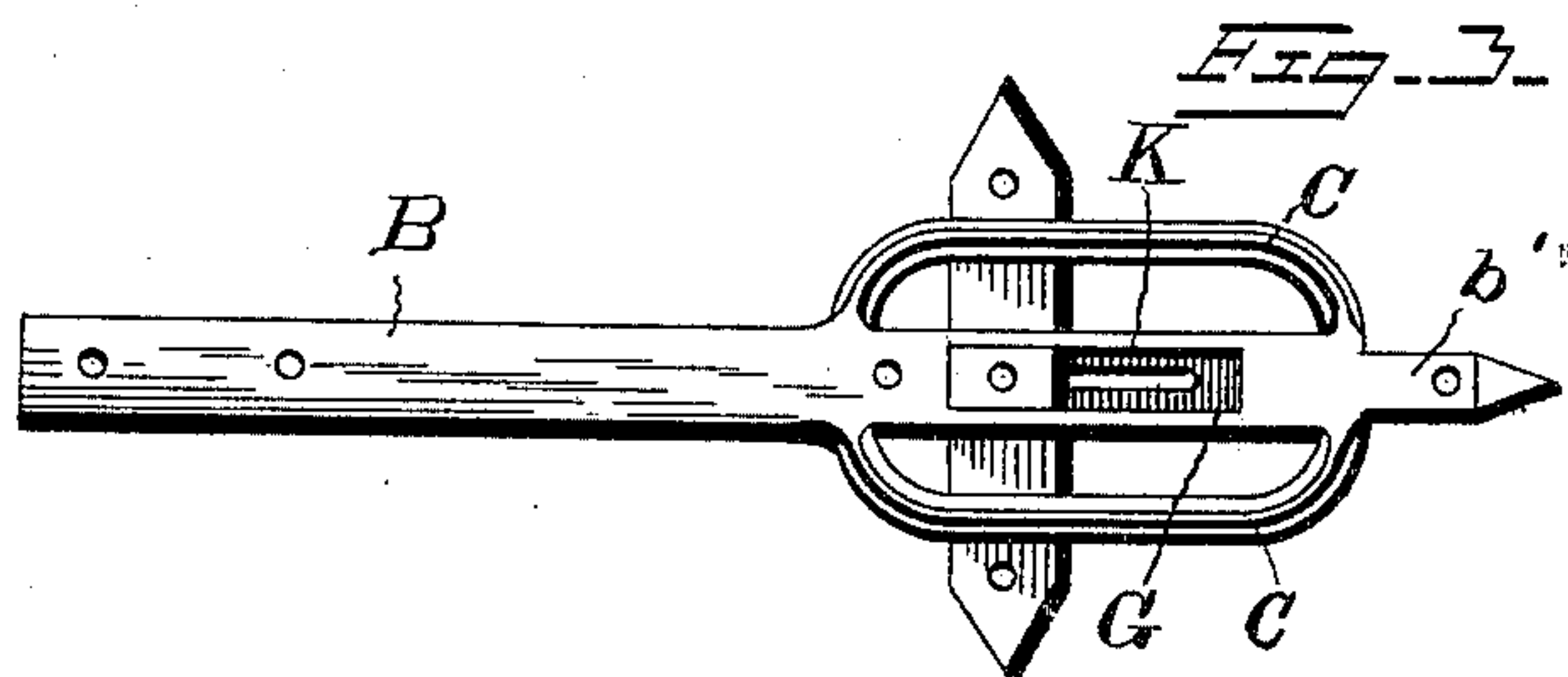
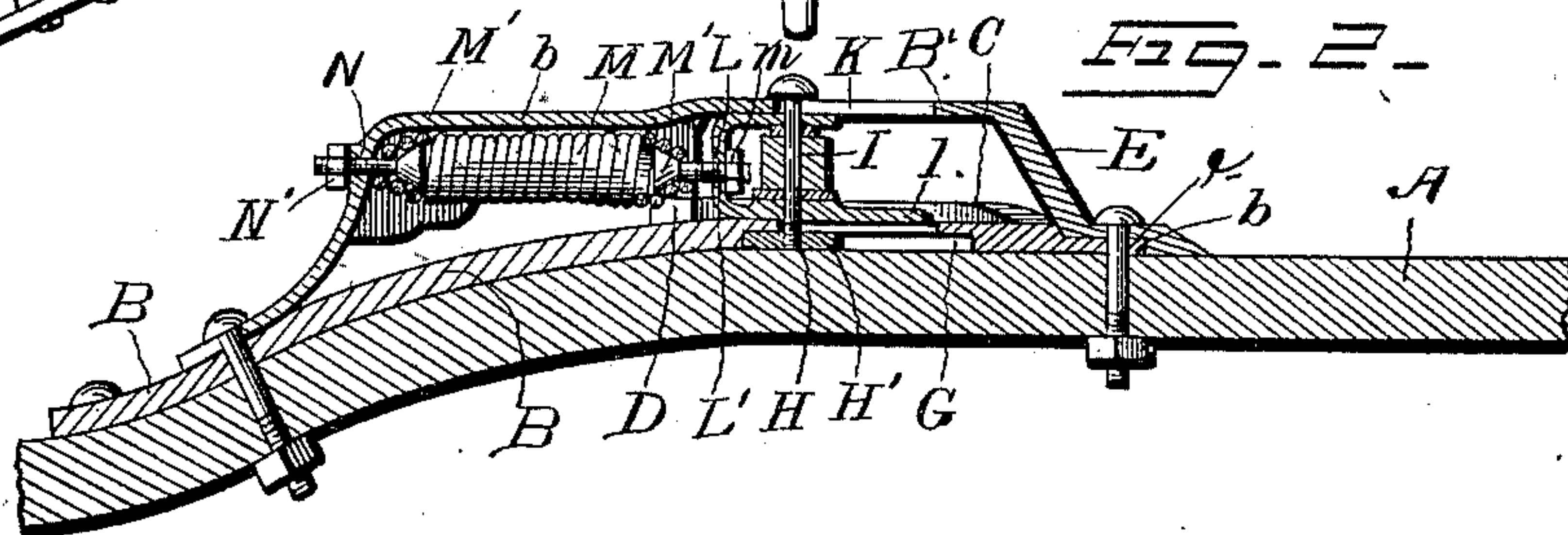
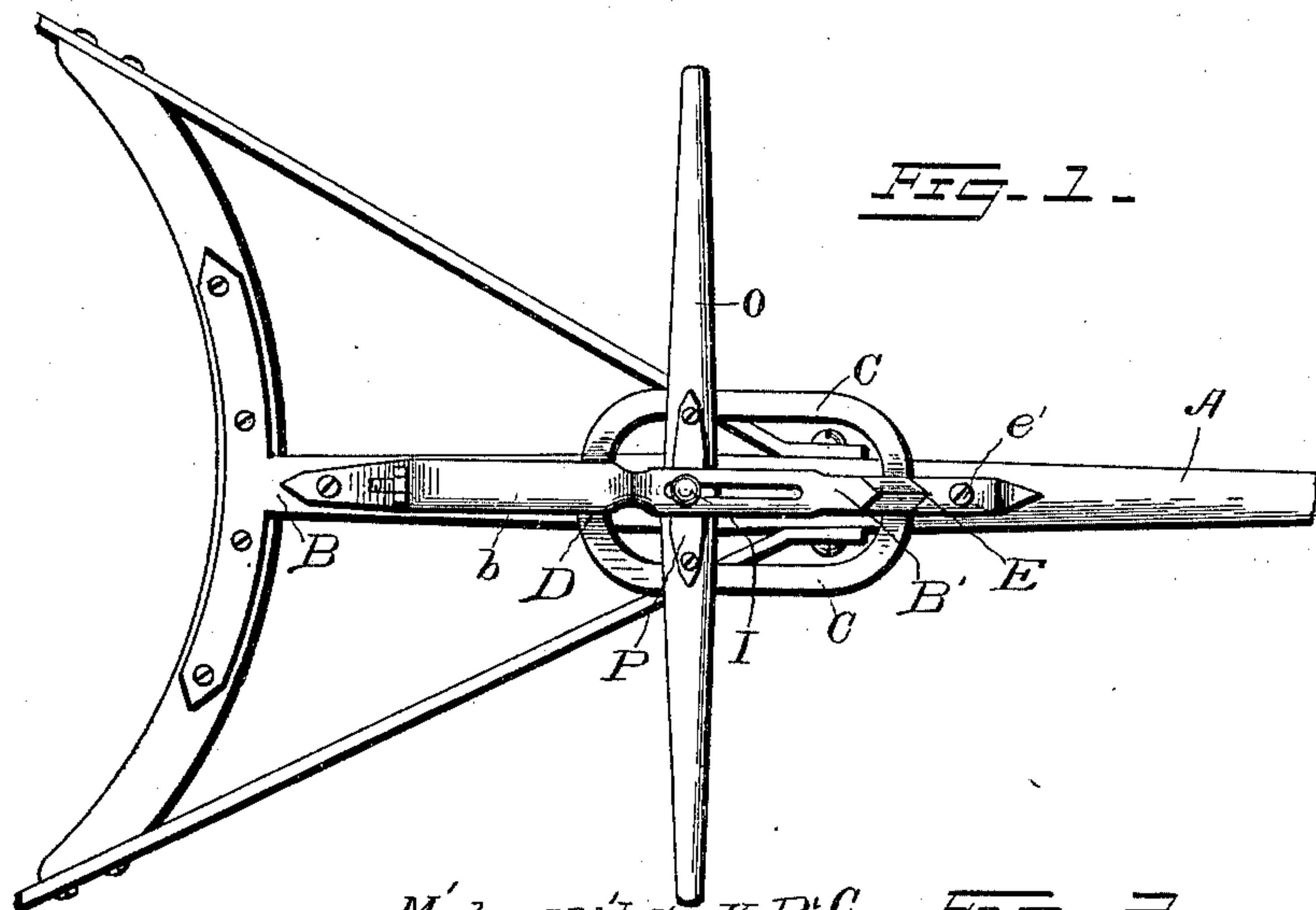
Patented Dec. 17, 1901.

S. V. GRAVES.

SPRING DRAFT ATTACHMENT FOR VEHICLES.

(Application filed Oct. 18, 1901.)

(No Model.)



Witnesses
R. A. Boswell
A. L. Hough

Inventor
S. V. Graves
By *Franklin A. Hough*
Attorney

UNITED STATES PATENT OFFICE.

SALATHIEL V. GRAVES, OF McFALL, MISSOURI.

SPRING DRAFT ATTACHMENT FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 688,946, dated December 17, 1901.

Application filed October 18, 1901. Serial No. 79,148. (No model.)

To all whom it may concern:

Be it known that I, SALATHIEL V. GRAVES, a citizen of the United States, residing at McFall, in the county of Gentry and State of Missouri, have invented certain new and useful Improvements in Spring Draft Attachments for Singletrees, &c; and I do declare the following to be full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in spring draft attachments for use in connection with shafts or poles of buggies and other vehicles; and it consists in the provision of a spring-actuated clevis which is adapted to be held to the doubletree or singletree and held by means of a suitable frame to the shaft or pole and having a reciprocating and swivel movement, whereby sudden jerks of the vehicle are prevented and the draft evenly regulated.

The invention relates, further, to various details of construction and arrangements of parts, as will be hereinafter more fully described and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which—

Figure 1 is a top plan view of the device attached to a pole of a vehicle. Fig. 2 is a central longitudinal sectional view through the pole and attachment. Fig. 3 is a bottom plan view of the attachment, and Fig. 4 is a cross-sectional view on line 4 4 of Fig. 1.

Reference now being had to the details of the drawings by letter, A designates the pole of the vehicle, and the frame for holding the draft attachment is designated by letters B and B'. The underportion B is bolted or otherwise secured to the pole and is provided with wings C for supporting the single or double tree on opposite sides of its pivotal center. The section B' of the frame has a housed portion *b* near one end, within which the spring for actuating the clevis is mounted. The under edge of the forward portion

of the housed or inclosed part of the frame-section B' rests upon shoulders D at the rear ends of said wings, while the forward portion of the frame-section is downwardly bent, as at E, and thence bent parallel to the projecting portion *b'*, against which it is held by means of a bolt or other suitable fastening, as at *e*. The extreme forward end of the section B' projects forward beyond the end of the portion *b'*, and the under surface of said end portion is flush with the under surface of the frame-section B, as shown in the longitudinal section in the drawings. The under surface of the section B is channeled, as at G, and a block H is mounted in said channeled portion and is provided with a threaded aperture H' to receive the lower threaded end of the bolt I. This bolt I has a reciprocating movement in the two parallel slots K K in the two frame-sections B and B' and passes through the ends of the clevis L and being threaded at its lower end engages the threads in the aperture in said block H. A spring M is provided, each end of which is engaged by a headed bolt M'. The shank portion of one bolt passing through an aperture L' in said clevis is engaged by a nut *m*, while the shank portion of the other bolt at the opposite end of the spring passes through an aperture N in the section B' and is engaged by a nut N'. This spring serves to retain the clevis normally at its farthest backward limit, but yielding under a sudden jerk upon the clevis, thus preventing jar to the vehicle. The doubletree O or singletree, whichever is used, is held to the clevis by means of said bolt I and also by means of the metallic plates P and Q, one being fastened to the upper side of the singletree or doubletree and the other to the under face. Said bolt I also passes through the plates P and Q, as shown. In order to guide the clevis as it turns upon its pivotal pin, one end of the clevis is prolonged, as at *l*, and as the clevis turns in one direction or the other the under surface of this portion *l* will rest upon the wings of the frame-section B. To hold the clevis true, its under portion is made flat to a location adjacent to its bent part, thus allowing a greater surface of contact between the clevis and the section B.

From the foregoing it will be observed that

a draft device made in accordance with my invention may be applied with slight modifications, which may be made without departing from the spirit of the invention, to shafts
5 or poles or other draft appliances and the pull on the vehicle equalized at all times, preventing sudden jars occasioned by uneven roads and sudden starting of vehicles.

Having thus described my invention, what
10 I claim to be new, and desire to secure by Letters Patent, is—

1. A draft appliance for shafts, poles, &c., comprising a frame made of two sections fastened together, wings on one of said sections,
15 a clevis, a bolt passing through same and having a reciprocating movement in parallel slots in the frame-sections, the under surface of one of the frame-sections being channeled out, a block seated in said channeled portion
20 and engaged by the threaded end of said bolt, said block having a reciprocating movement in the channeled recess, one end of the clevis projected beyond its pivotal portion and designed to rest upon said wings as the clevis
25 is turned on its pivot, a singletree fastened

to the clevis, and a spring fastened at one end to the clevis, its other end secured to the frame, as set forth.

2. In combination with the two frame-sections B and B', one of which as B having 30 wings, and a projection at its forward end, and shoulders near the rear ends of its wings, the other section B' having a housed portion the edges of which rest upon said shoulders, the forward end bent and fastened to said 35 projection on the frame-section B, a clevis and bolt passing through same, a guide-block for said bolt working in a channeled recess in the under surface of the frame, metallic plates mounted on said bolt and adapted for 40 attachment to a single or double tree, and a spring attached at one end to the clevis, its other end secured to the frame, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

SALATHIEL V. GRAVES.

Witnesses:

ERNEST C. LOCKWOOD,
SIMON B. WILLIAMS.